8. Huang

Program Name: Huang.java Input File: huang.dat

Huang is in a science class studying how tree rings show the age of a tree. Fascinated with this notion, he decides to experiment with an exercise that will celebrate this cool aspect of trees by writing a spiral program using the characters in various tree names that are common to the world. Although he is aware that tree rings are NOT in a spiral configuration, he doesn't really care…it's close enough.

For example, bamboo is prevalent through many countries in the tropical regions, and is used quite often in constructing houses and other elaborate structures. He decides to use the letters in the word BAMBOO to make a 5X5 spiral that looks like this:

```
BAMBO
BOOBO
MO*AB
AOBMA
BOOBM
```

Notice how the letters go across the top, then down the right side, across the bottom, then up the left side, spiraling towards the middle until they stop when they reach the center. The last instance of the word BAMBOO may be partial and not fit exactly, but Huang is OK with that. It's just fun to see the patterns. He also decides to put a `'*'` in the very center of the grid to mark the center of the spiral pattern.

Input: Several names of trees, all in uppercase, no spaces or symbols, each followed by an odd positive integer N (2<N<20) indicating the size of the spiral to be created.

Output: Create and output an NXN spiral grid of letters using the name of the tree, with a '*' in the very center. Output a blank line after each grid.

Sample input:

```
BAMBOO 5
BLOODWOOD 7
CEDAR 9
```

Sample output:

```
BAMBO
BOOBO
MO*AB
AOBMA
BOOBM

BLOODWO
WOODBLO
DODWOOD
OOO*OOB
OLLBDDL
LBDOOWO
BDOOWDO

CEDARCEDA
EDARCEDAR
CCEDARCRC
RREDARECE
AACR*CDED
DDRADEADA
EEADECRAR
CCRADECRC
RADECRADE
```